THE FARMER & GARDENER

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TUESDAY, BALTIMORE: OCTOBER 24, 1837.

Mulberry Culture—Believing that the fall is the best season for persons at a distance to procure their supplies for early spring planting, we take the liberty of stating that we have between 25,000 and 30,000 Morus Multicaulis, or many-stalked Mulberry trees for sale. The roots are chiefly *two* and *three* years old, and if planted on the first opening of the earth next spring, might be fed from next season. Anxious to spread the culture abroad, we shall sell our trees with their heads undespoiled of their limbs, and to such individuals or companies as will take 3000 or upwards, we will make the price an *object*. That this variety of the mulberry is better adapted than any other to feeding the silk worm, there can be no question; this fact, together with the firm conviction which rests upon our mind, that the culture itself, if properly fostered, is calculated to confer lasting benefits upon the country, make us solicitous to see it prosper. Persons wishing to know our terms will please address *Edward P. Roberts*, Baltimore Md.

Wheat—Those who have not yet got in their wheat, we would remind of two things. *First*—by no means to omit putting their seed in a *soak* made of *brine*, *lime-water*, or *ley*—and *secondly*—to plough it in some three or four inches deep; while the first will cleanse the grain of all smut and destroy any eggs that may be deposited on its surface, the latter will greatly tend to prevent the frost from spewing the plants up, should the coming winter prove to be one of alternations of freezings and thawings, which are so disastrous to small grain.

Potatoes, Beets, &c.—All roots that are now fit to be taken up out of the ground, should be gathered and secured before the frost affects them.

Spring Wheat—To prevent disappointment we respectfully state to our readers and patrons that we have closed our sales of spring wheat.

HARVESTING BEETS.

Let a man pass between the rows, loosening each Root with a spade—while another man or a boy follows him pulling up the beets thus loosened and shaking off the dirt which adheres to them, by knocking two of them together. He then lays them upon the ground in a row, perfectly straight and regular, with all the tops or leaves in each row turned the same way. A man then walks between the rows with a sharp spade and cuts off the leaves of each with a smart stroke. The roots are thrown together in small heaps and the leaves may be gathered and fed to cattle or swine, who will devour them greedily if not too much injured by frost. When they are harvested late this is always the case, and they may then be ploughed under and will make a good dressing for the land.—[*Courier*. H. O. A.

SMUT IN GRAIN.

We are surprised to learn that smut is still permitted to adulterate and diminish our grain crops, when it is a fact amply and satisfactorily established, that steeping the seed grain twelve hours in brine, and rolling it in fresh slaked lime, before sowing, will prevent the evil. The *paper-brand*, *dust-brand*, the two species of smut, are parasitic plants, the minute seeds of which attach to the grain, and are propelled through the sap vessels of the plant, to the germs of the young grain. The salt and lime destroy the vitality of these seeds.—*The Cultivator*.

INSECTS IN WHEAT.

An Extract from a letter to F. WOOD, Esq. *of Winthrop.*

ELIJAH WOOD, ESQ.—*Dear Sir*:—I received your letter of the 12th of August, some two or three days since, and hasten to reply. It seems from your letter that the grain worm has been doing serious injury in your part of the country, and you appear exceeding anxious to learn all the facts you can, for your own benefit, and also the public benefit. I am glad to find you so wide awake on this subject, for I verily believe the greatest obstacles which impede our success in the cultivation of grain, originate from the depredations of insects.

I have to regret that my attention has been so much diverted by other cares and duties from this subject, so that many observations have not been made with that accuracy I could wish. I find, however, that some of my neighbours have paid some attention to this subject, and have kindly answered my enquires. I will briefly state the result.

1st. The extent of the injury done this year, compared with the last.

The most of people with whom I converse, set it much lower than last year. On low lands and intervales the damage is much the greatest.

2d. There appears to be more than one species of them producing the injury to the grain. I say *grain*, for spring rye has suffered perhaps more than wheat. I had a piece of late sown winter rye in the same field with a piece of wheat—side by side. I first noticed some small black flies on the rye heads; the full grown ones somewhat larger than the species in common language emphatically termed "*Black flies*," so well known in new settled places by their excessive biting. But their business appeared to be entirely with the grain, as they were apparently forcing their heads down among the husks enclosing the kernel. I noticed the same appearances in a neighbor's field in detached rye heads among his wheat; and he has since given me a very minute account of their operations. He states, that, when the rye heads first started up above the wheat, and began to blossom, the flies would crawl up on them and appeared to be digging into them; and he observed that when he saw these in plenty at night, in a very short time the new forming kernels entirely disappeared, and that there was not a single kernel of rye to be found in these detached heads. At this time no flies were seen on the wheat. Soon after, the bearded wheat, where there happened to be detached stalks in the field, (being a little earlier than the bald wheat,) started up above it, and arrived at the same state of maturity, the flies attacked that; and lastly the bald wheat. My neighbor is confident, from his observation, that these flies injured the grain by sucking the juices, as well as depositing their eggs and producing worms. The same neighbor has considerable winter rye, but noticed no damage on that, either by flies or worms; but he has one piece of spring rye almost entirely ruined by them. He says he has seen but very few of the long slim flies described in the papers. Another neighbor has stated to me the same facts as to the color and size of the flies he saw on his grain; so it seems, that, in this neighborhood at least the greatest injury has been inflicted by this species of fly.

I conversed, a day or two since, with a gentleman living in Dixfield Village, who informed me that the flies most plenty on the wheat in that vicinity, were the slim orange colored flies. And I have made enquiries of some other people in different parts of the country, who generally agree in regard to shape, in describing the flies they have noticed, but not in color. I have, myself, seen but one of the orange colored flies this year, and that was when I was washing my wheat to sow. This was on the grass where I had been skimming off the blighted wheat. Two or three days ago, about sunset, after a very warm day, I seated myself at the edge of a late sown piece of wheat, for observation. I saw perhaps a dozen species of flies, of almost all shapes and sizes, apparently busy among the grain, both on the stalks and heads. One of them resembled the orange colored flies in shape; but was yellowish white in

color. Those flies were all exceedingly nimble in their movements when disturbed, and were as active on the wing as gazellen are on the foot. At the same time I saw myriads of similar looking flies basking in the sunbeams in various directions.

3d. Last year I sowed a piece of wheat on a field 70 or 80 rods from any other cleared field, and where no manure had ever been carried, and where no other grain had ever been cultivated except oats, and a very small piece of wheat, some three or four years before. This was injured by them the worst of any I ever had. I did not get the amount of seed sown. Though we may well suppose some of these might be carried in the seed wheat, yet why should they be thicker there than about the barn, &c. where they might be carried in the manure, and in various other ways.

I believe, Sir, it would be nothing but vanity or obstinacy in any one, to speak with much confidence as to any remedy for preventing their attacks. Lime and ashes have been tried in this neighborhood without success; and as to smoking our wheat fields with brimstone I have little faith in the process. All these different kinds of flies seem to agree in one thing: they take shelter among the weeds and grass at the bottom of the grain. Here I think we must attack them to succeed; and I think it would be difficult to get smoke to settle low enough to dislodge them. I hope, however, you will pardon me for theorizing a little. If we could, by trying experiments on a small scale, and any liquid substances, (not too costly) that would dislodge them, we might, I think, then find some way to spread it over our fields. I have thought of two:—First, by engines —English Agriculturists use engines for similar purposes. Second, by spouts—such as are used in some places to water meadows, &c.—These being fixed in proper places in the spring when the wheat was sown, might serve for the triple purpose of conveying liquid manure over the land—supplying the grain with moisture in time of drought, and of conveying some liquid substance to dislodge the flies, and of course prevent the worms. This plan, too, anticipates another advantage. You might then plough the most barren field, and fearlessly sow it with wheat, and manure it just as you pleased, or as experience should determine to be most advantageous.

I am, very respectfully, yours,

JOSEPH H. JENNE.

Peru, Sept. 9th, 1837.

MANGEL WURTZEL,

BY MARTIN BOYLE.

Mangel Wurtzel is a kind of *red beet*, not liable to be injured by disease or insects, and proof against the change of seasons. It requires loamy loose soil, and abundance of short and rich manure. It gives no unpleasant taste to milk or butter, (an objection which may be urged against turnips, and most kinds of cabbage)—quite the reverse. Pigs, as well as milch cows, are fond both of its leaves and roots. Sixteen or twenty perches under it, will support a cow, allowing her sixty pounds weight per day, for the five winter months; and a half a pound of seed, which will cost about 1s. 6d. will sow these twenty perches. From the 20th to the end of April, is the best time for sowing the seed; and those of you who are not likely to have your ground at that time ready, should sow in a seedling bed, in order to transplant when the ground is prepared; and in this case you should not put out the plants until they are about an inch in diameter, else they will not arrive at full size. The best way, however, is to sow the seed where it is to remain, and the process is as follows:

Prepare your land as if for drilling potatoes—open the drills eighteen inches or two feet distant, the deeper the better, unless there is yellow clay at the bottom—fill them with short manure—cover them with four or five inches of earth—roll them lengthways, and then on the smooth and level top make hills with the dibbling stick, two inches in depth and about twelve inches apart, and into every hole drop two seeds, which are to be covered as the work proceeds. When the plants are about 2 inches high, you are to draw out from each hole the extra plant or plants, leaving of course the strongest and healthiest plant behind. Keep them clean from weeds, but do not earth them. If any of the plants appear to run to seed, pull them out and transplant into their room, after stirring up the earth, and applying a little fresh manure, (and to the want of attention to this point the comparative failure of transplanted crops is to be attributed) other plants of mangel wurzel, rape, cabbages, or Swedish turnips, which should always be in a reserved seedling bed, in case of failure in any crop. In September pull the leaves —[cutting them close to the crown will cause the root to rot if left in the field during the winter]—and give them to your cows, sheep, and pigs. You will also find that they make a good substitute for greens or spinach.

The following is Mr. Meadow's calculation of produce:

Drills 2 ft. distant, Plants 2 ft. distant,	220 plants per perch—23,280 per acre.
Drills 2 ft. distant, Plants 18 in. dist.,	147 plants per perch—23,580 per acre.
Drills 18 in. dist. Plants 1 ft. distant	294 plants per perch—47,040 per acre.
Drills 18 in. dist., Drills 11 in. dist.,	252 plants per perch—40,320 per acre.
Drills 18 in. dist., Plants 18 in. dist.	195 plants per perch—31,360 per acre.

You may safely calculate on 30,000 plants per acre. If you average the plants at 3 lbs. each, which is much too low, you will have 90,000 lbs. or about 40 tons, not of a watery substance like turnips, but a firm nutritious food.—*Farmers' Magazine.*

[From the Poughkeepsie Telegraph.]

THE CROPS.

The crops are now about out of the way of the weather, as corn is being cut up and secured, buckwheat is gathered, and the other crops have long since been housed. In summing up, it may be stated that the wheat crop in this country has been light, but about the same as last year. Grass was much heavier, and the corn crop, though not a good yield, is considerably larger than the last season, while oats and buckwheat have turned out a most ample yield. We do not believe that such a harvest of these two grains has ever before been made in this country—at any rate, we may safely say it has not been exceeded. The condition of our farmers, despite of a hard season to the country generally, is better than last year this time. Then many of them had been affected with the mania of speculation which was abroad, and had contracted more debts than in ordinary times and in a natural state of things they would have deemed prudent. And those debts were to be paid this spring. But as their crops turned out light last year they had but little to sell, and therefore have been able to pay but little. Still it has been a year of husbandry with them; not an article has been purchased that was not positively necessary; and as every thing they had to dispose of found a quick market and at a high price, they have got through the summer, paid something on their indebtedness, and now with full barns and granaries, and with desires restricted, they are much better off as a whole than they were a twelve-month since. But let us not be understood that this is the condition of all our farmers. Far from it. On the other hand, most of them are out of debt; they have not burnt their fingers by the speculations of 1836, and have never been easier in their money matters than for the past summer.

Agriculture has become a greater business than usual—the certainty of its returns and the independence of the farmer's life have come to be matters of calculation by those who formerly esteemed them very lightly. Many persons about this village—mechanics, carmen, &c. finding their business dull, have taken lots adjacent to the town and cultivated them on shares; every spot in gardens has been turned to account; and from all sections of the country we hear that about the same course has been pursued. The effect of this has been the planting of potatoes and other esculent roots, the cultivation of which is easy, and of which almost every person has some knowledge, in greater quantities than they were ever before put in the ground, and we believe the yield has been large.

Having published from several papers just prior to harvest, opinions in regard to the crops, which spoke of their probable abundant yield, we have endeavored to collect information since that time of what their product has been. A gentleman writes us from Castile, Genesee county, which is in the wheat district of "western New-York," of the date of the 3d inst. as follows.

"Our wheat crop in this vicinity is very much injured by rust; many fields of very heavy growth, sufficiently so if plump to yield from 30 to 35 bushels per acre, are reduced one quarter, one half, three fourths, and others not harvested at all. I presume to say that my crop will fall short from one quarter to one third, yet the straw my cradlers say is the largest they have ever cut. Our grass is good; corn a fine growth, but the prospect unfavorable for getting sound. I have a fine lot of mangel wurtzel and ruta baga. If the frost holds off that I may have a suitable season for maturing and gathering them, I will at some future day give you a statement of the yield by the acre."

Our information from gentlemen whom we have seen from the western part of the state confirms the above. The wet weather of June caused a rapid growth of wheat, which made the straw very large; and had we had dry favorable weather a few days before and at harvest, the yield would have been as large as was anticipated in

the early part of summer. But the continued wet weather brought on rust, and destroyed wheat to the amount of thousands if not millions of dollars.

But what do we draw from these facts the reader may inquire? That the crop of wheat in this state is on the whole better than last year—and doubtless much better, take the country over; that the corn crop is also better; that oats and buckwheat have never been surpassed; and that the yield of roots is also very large. Will the price of produce then be less? We think it will, *but still it will be high.* Flour will command from $7 to $10, and the price of other grains will be regulated accordingly. Butter and such articles will stand about as they have been. Pork will be some less, and cattle not quite so high. These are our views. They may or may not be correct. Time will tell.

[*From the Ohio Farmer.*]

MEADOWS.

It has been remarked by the writers on agriculture, that *natural meadows* are no where to be found; because all grass land which is in a state of nature, neither enclosed nor cultivated, is universally pasture. Many centuries probably elapsed, before the invention of preserving grass by drying it into a state of hay; and this discovery, which gave rise to what we now term meadow, is supposed to have preceded that of tillage; though this may be considered somewhat doubtful, when we reflect that, in the primitive state of husbandry in this country, the cattle which were intended for consumption through the winter, were slaughtered in the latter end of autumn, and salted for use. To such tracts of ground as consist of maiden earth, some persons are still disposed to limit the extent of meadow land; but generally speaking, all land that is annually, or even occasionally mown, is at present known under the denomination. Some considerable tracts of marsh have never yet been submitted to the plough, and much land, which, lying on the banks of rivers, is subject to be occasionally overflowed, is still in a virgin state; but by far the greater part of the upland meadow throughout the kingdom, bears evident marks of having been anciently under cultivation.

The *general management of meadow land*, lies in a narrow compass—little diversified by practice, except when rendered necessary by difference of season and quality of soil. As the early vegetation of grass is promoted by taking the stock soon off the ground, the uplands are usually "hayned," or laid up at Candlemas; but richer land is often left open until the latter end of March; sometimes, indeed, particularly if the weather be moist, even later; but, if continued too long, the hay harvest is proportionally retarded and diminished. On this subject, Mr. Sinclair has stated that a given space of the same quality of grass having been cut towards the end of March, and another space of equal size left uncut until the last week in April, the produce of each being afterwards taken at three different cuttings, that of the space last cut exceeded the former in the proportion of three or two; and in one instance during a dry summer, the last cropped space exceeded that which was cropped (first) as two to one. On land of the latter description care should also be taken to remove the heavy cattle early in autumn, for such ground being commonly of a loamy nature, and soon softened by a fall of rain, would otherwise be poached, and it is well known that in wet weather the hoofs of bullocks form holes which hold water, and thus render the herbage sour.

After the hay has been removed, the meadows are generally shut up for some weeks, until the grass again springs, when the stock are turned upon them in such proportion as they appear able to bear during the autumn; though light store stock are sometimes turned in immediately to crop such spots around the margins, and in the water furrows, as may have escaped the scythe. Other farmers, however, reserve it during winter, and then use it in the manner already stated in the preceding account of fogging. Some, also, live in the neighborhood of large towns, where they have the advantage of procuring manure, mow the land a second time, some time in the month of August; but in that case, they should be earlier than usual in the first crop. Cow-keepers, indeed, frequently cut it two or three times in the summer, as they find that rowen hay is of a soft, grassy quality, which occasions a greater flush of milk than that which is first mown, though it does not increase its richness, and they therefore cut the grass long before the seed has time to ripen. This frequent mowing, however, if it does not exhaust the soil, has a tendency to reduce the herbage; an injury to which new meadows are more exposed, than such as are old; and, therefore, land recently laid down to grass, should not be mown, but pastured with sheep or with very light stock, during the two first years, as the surer method of furnishing it with luxurient herbage.

After the cattle are removed, the land is *bush-harrowed and rolled.* The bush-harrow spreads those small portions of mould which are thrown upon the surface by the earth-worms, and are, so far, an excellent dressing, when the separation is properly performed. This, however, is most commonly done by interweaving some strong but pliant branches of trees, hedge row thorns, through the open squares of a heavy harrow, which thus forms an efficient brush, and when drawn over the ground performs its duty perfectly during a short distance; but the branches, being pressed close, and worn by the motion, soon become so flat as not to have the effect of spreading the earth. The best mode is, therefore, to fix the branches upright in a frame placed in the front part of the roller; by which means they can be so placed as to sweep the ground effectually, and when worn can be moved a litle lower down, so as to continue the work with regularity. In this manner the bush harrow can also be drawn by a single horse and driven by one man, instead of employing two horses and two drivers, as is the case when the land is rolled and harrowed separately. The object of rolling is merely to lay the land as smooth as possible for the convenience of mowers, for it is thought by many farmers to retard the progress of vegetation; though there can be little doubt, that if the soil is porous and spongy, the roller will add to its firmness, and give a more substantial bottom to the sward. It has, indeed, been stated that the operation of heavy rolling has been found to add six or seven hundred weight of hay per acre on the produce of the crop.

[From the Southern Agriculturist.]

BLIND DITCHES AND WELLS.

Mr. Editor—An admirable plan of draining in the West is after the French fashion, by which, whole fields can be worked with the plough, without the obstacles arising from open ditches.—Below culture-mark, a ditch is dug with the plough hoe and spade, and 'eased off' according to the declination required. Two pine saplings, or cypress poles, of equal length and similar thickness, are then laid about four inches apart in the ditch, parallel to one another: upon these two saplings is laid another of the same length, and of thickness sufficient not to fall too deep between them, and obstruct the passage of water. The larger the vent the better. The whole is then covered with pine trash, and if that cannot be procured, any trash difficult of decomposition in water; then the earth is thrown in this, and the ditch filled up. The consequence will be this—the water finding its level from the surface of, and the circumjacent soil, percolates through the pine trash into the drain, and is carried off at the mouth of the drain into a main ditch. In this way, the coldest and sourest lands have been reclaimed and sweetened; and there can be no interruption to the working of the plough, inasmuch as the drain is below plough mark. These drains may be made as deep as is deemed requisite, with the largest pines, and of any length, if some care he had in packing the pine trash, and jamming the ends of the saplings close together. I have heard they will last for a century—that is, pine or cypress. In fact any other kind of wood would do nearly as well, for woods always in fresh water and not exposed to the atmosphere, take a long time to decay.

What excellent use could be made of the blind ditches in the flat lands of our State. How many acres now unavailable, would they not reclaim.—They may be made serviceable in every sort of land, whether rolling, level or broken, at a comparative expense of little consideration, when it is remembered, how often open ditches are cleaned out to let off the water. Nor are we required to take as much pains in digging those ditches, as we do with others,—get the declination and space for laying down the saplings, and packing the trash, and you may not heed nice work or the figure of the sides. On the fine cotton lands not sufficiently high, I would respectfully suggest their value—they could be used even on sandy lands, with good effects, so as to guard against a season of continued rains.

This plan of ditching is common in the West. It has its opponents, yet, a notion has occurred to me, which, when understood, will doubtless, at once, confirm their importance. Some contend, that they do very well to keep the land sweet, and carry off a light fall of rain, but, are inefficient in broken fields, where the water from the surface concentrates on the lowest parts. To obviate this, permit me, Mr. Editor, to propose the digging of blind wells. Suppose, sir, one is cultivating a field, elevated on the boundaries and declining to the centre, or to any other part, where the water concentrates—to drain off, not only the under, but the over surface run of water from this centre, I would dig a well, say four feet deep, (I am not

particular) the sides of which should be made of two inch, or one inch and a half plank, here and there bored with a three-quarter inch auger—the plank to be nailed outside of the four posts, that should be let into the well to constitute its frame work. *Into each side of this there should be an opening for the mouth of a blind ditch, two feet or more from the top of the well.* Around the sides of the well should be packed pine trash—the top of it should be a level with the earth, or an inch below, covered with plank, and bored as aforesaid, in such a manner, that the top could be taken off at pleasure. The water above the surface and below it, would run from every part of the field to this well; and should it bear sand along with it, the sand from its specific gravity, *will fall below the mouths of the blind ditches in the bottom of the well*, and the water would be carried off. The sand at the bottom could be taken out whenever necessary, and to obstruct the ingress of trash, straws, &c., a wire covering, at a trifling expense, could be nailed over the mouth of the ditch. That fall of water, which would seem to bear along with it sand in quantities so rapidly as to produce the choking up of the ditches, will accumulate in the well in bulk sufficient to force through the sand along with the flow of water to the outlets of the ditches. However, the choking of the ditches need not be feared, the incessant run of water at all seasons will keep them clean.

These wells should not be covered, if the plough be not used; if it be used, they should be made strong enough, to allow a horse to walk on them, without endangering his limbs.

In this way, Mr. Editor, I flatter myself the whole field could be drained and worked with the plough. I have supposed a case—the judgment of the planter will tell him under what peculiar circumstances of location of soil how far he should vary from the plans I have adopted in this imaginary field. The plan of making the blind ditch and well, may be estimated without referring its utility to the localities of any particular description of land—and should it serve your readers, or any one of them, I shall be amply repaid for the time consumed in the composition of this article.

Yours, with great respect, Sir,

C.

Remarks by the Editor.

Our correspondent is entitled to the merit of originality for his suggestion of blind wells—the ditches of which he writes, we have no doubt, could be turned to account by our long cotton planters, inasmuch as their delicate staple calls for the dryest soils. How far they would succeed in carrying off the water in low lands, more especially if level, we are yet incredulous. For broken lands they might do very well—but in the low country, where the fine cotton is cultivated with the hoe, we should prefer the open ditches. The blind might be used with great good effect between the open quarter ditches, to keep the soil dry; indeed we are pleased with this notion, and recommend its consideration to those interested. Should this plan of the blind ditch and well be sufficient to carry off the surface water, as our correspondent says, it would enhance the price of those fields which are cultivated with the plough—particularly in sandy lands, interspersed with low bottoms, it would be the most effectual way of draining them, for open ditches in sand are too liable to cave in and choke after the lightest rains, or from the power of the winds. We recommend the whole article to the grave consideration of our readers.

[From the Quarterly Journal of Agriculture.]

Experiments in Feeding Cattle on different descriptions of Food. By Mr. Robt. Stephenson, Whitelaw, Haddington.

The cattle selected for this experiment were oxen rising two years old, and bred on the same farm. Their live-weights were ascertained at the beginning, during different periods, and at the end of the experiment. They were divided into three lots of six beasts each, and placed in open courts with sufficient sheds and stalls, and small mangers fitted up for corn and linseed cake. A correct account was kept of the weight of food consumed by each lot. Lot 1st were allowed linseed cake, bruised beans, and bruised oats, in addition to what turnips they could consume: and, for the last 24 days of the experiment, 20 lb. of potatoes per day were given to each beast. Lot 2d received the same allowance with the exception of linseed cake: and, for the last 24 days they got only 10 lb. of potatoes, each beast, per day. And the 3d lot were fed on turnips alone. None of the lots were allowed hay. The objects of this experiment are, first: to compare cattle fed partly on linseed cake with those which had none; secondly, to compare those fed partly on corn with those which had none; and, thirdly, to compare those fed solely on turnips with those which had different sorts of food. From former trials we are inclined to believe that cattle consume food in proportion to their weights when nearly alike in condition. We therefore resolved, in this experiment, to divide the 18 cattle, so as to confirm or refute this belief. They had been all kept in the same manner since they were calved, and were pretty much alike in condition, although varying considerably in weight. The six heaviest cattle, weighing in live-weight 486 imperial stones, were selected for lot first; the next six heaviest of 443 stones, constituted lot second; and the six lightest, made lot third, were 346¼ stones.—These weights were ascertained on the 23d November, 1834, when the experiments began after the cattle had been in the court-yard from 20th September, 1834, and all fed on the same kind of food, namely, common white globe turnips. The white turnips given during the experiment were of good quality, raised with dung upon a rather stiff soil, and estimated about 20 tons per acre, their gravity on the 19th November, 1834, being 897.4 oz. per cubic foot. The Swedish turnips were also of good quality, grown on good clayey loam, 20 tons per acre by weight and measurement, their gravity being 1030 oz. per cubic foot on 19th November; but they had lost weight for bulk considerably by the 17th March following, when the last were raised from the ground, being then only 976.9 oz. per cubic foot. The white turnips used before the experiment commenced on 23d November, 1834, were raised with bone manure, and rather inferior in quality, being only on 19th November, 774 oz. per cubic foot. With these preliminary observations, we will proceed to state the particulars of the experiment.

1. Food consumed by each beast of lot 1st—

	£	s	d
13 cwt. 1 qr. 16 lb. white turnips from 22d November, to 3d December, 1834, ten days, being 150 lb. per day at 3d. per cwt.	£0	3	4
30 lb. bruised beans, for 10 days being 3 lb. per day at 13s. per boll, allowing 60 lb. the bushel,	0	1	7½
40 lb. linseed-cake, for 10 days, being 4 lb. per day at ¾d. per lb. or £7 per ton,	0	2	6
25 cwt. 3 qr. 20 lb. Swedish turnips, from 3d December to 25th December, 1834, 22 days, being 132 lb. per day, at 4d. per cwt.	0	8	7½
88 lb. linseed cake, for 22 days, 4 lb. per day, at ¾d. per lb.	0	5	6
66 lb. bruised beans, for 22 days, being 3d. per day,	0	3	7
69 cwt. 0 qrs. 21 lb. Swedish turnips, being 123 lb. per day for 63 days, from 25th December, 1834, to 26th February, 1835,	1	3	0¾
189 lb. bruised beans, for 63 days, being 3 lb. per day,	0	10	2½
126 lb. bruised oats, for 63 days, being 2 lb. per day, at 20s. per qr. say 42 lb. per bushel,	0	7	6
189 lb. linseed-cake, for 36 days, being 3 lb.* per day,	0	11	9¼
21 cwt. 2 qrs. 2 lb. Swedish turnips, being 100 lb. per day, from 26th of February to 22d March, 24 days,	0	7	2
480 lb. potatoes, for 24 days, being 20 lb. per day, at 6s. per boll of 4 cwt.	0	6	5
72 lb. bruised beans, for 24 days, being 3 lb. per day,	0	3	10¾
48 lb. oats, for 24 days, being 2 lb. per day,	0	2	10¼
72 lb. linseed cake, for 24 days, being 2 lb. per day,	0	4	6
Total cost of feeding one beast of lot 1st,	£5	2	7

2. Food consumed by each beast of lot 2d—

14 cwt. 1 qr. 24 lb. turnips, being 162 lb. per day, for 10 days, at 3d. per cwt.	0	3	7¼
30 lb. bruised beans, for 10 days, being 3 lb. per day,	0	1	7½
29 cwt. 1 qr. 24 lb. Swedish turnips, being 150 lb. per day, for 22 days, at 4d. per cwt.	0	9	9¾
66 lb. bruised beans, for 22 days, being 3 lb. per day,	0	3	7
67 cwt. 2 qrs. Swedish turnips, being 120 lb. per day, for 63 days,	1	2	6
189 lb. bruised beans, for 63 days, being 3 lb. per day,	0	10	2½
126 lb. oats, for 63 days, being 2 lb. per day,	0	7	6

*It will be observed that the linseed cake has been reduced from 4 lb. to 3 lb. per day, because the cattle, on being allowed oats in addition to the beans, *would* not eat more than 5lb. of linseed cake per day.

24 cwt. 2 qrs. 16 lb. Swedish turnips, being 115 lb. per day, for 24 days,	0	8	2½
240 lb. potatoes, for 24 days, being 10 lb. per day,	0	8	2½
72 lb. bruised beans, for 24 days, being 3 lb. per day,	0	3	10¾
48 lb. oats, for 24 days, being 2 lb. per day,	0	2	10¼
Total cost of feeding one beast of lot 2d—	£3	17	0

3. Food consumed by each beast of lot 3d—

11 cwt. 3 qrs. 14 lb. white turnips, being 113 lb. per day, for 10 days, at 3d. per cwt.	£0	2	11½
22 cwt. 2 qrs. 10 lb. Swedish turnips, being 115 lb. per day for 22 days, at 4d. per cwt.	0	7	6¼
64 cwt. 2 qrs. 21 lb. Swedish turnips, being 115 lb. per day, for 63 days,	1	1	6¾
19 cwt. 2 qrs. 24 lb. Swedish turnips, being 72 lb. per day for 24 days,	0	6	6¾
Total cost of feeding one beast of lot 3—	£1	18	7¼

Abstract of Cost of Keep.

Lot 1st, 119 days, £5 2 7 = 6,0348s. per w't.
Lot 2d, 119 days, 3 17 0 = 4.5294s. per w't.
Lot 3d, 119 days, 1 18 7¼ = 2.2712s. per w't.

Improvements in live weight.

	Lot First.		Lot Second		Lot Third.	
	Live weight in stones.	Improvement in stones.	Live weig't in stones	Improvement in stones.	Liveweight in stones.	Improvement in stones.
Nov. 23, 1834	486	–	443	–	346½	–
Dec. 25, "	520	34	469	26	354½	8
Jan. 24, 1835,	554	34	499½	30½	375	20½
Feb. 25, "	582	28	528	28½	389	14
Mar. 23, "	594	12	544	16	395½	6½
Total improvement in seventeen weeks.		108		101		94

We have thus obtained data on which we can ascertain whether the foregoing methods of feeding of cattle can be practised without loss.

We regret that we are unable to present the amount of the beef, tallow, and hides, of all the cattle in this experiment when killed, having only obtained a correct account of four of them, which were slaughtered by Mr. M. Hutchison, Leith.—But as we have ascertained pretty accurately the dead weight of cattle, from a number of experiments on those of like condition and age, by multiplying the live weight by the decimal 571, we shall apply this rule to live weights in the above table, in order to ascertain the quantity, and estimate the value, of the beef produced; and we shall add 6d. per stone to the beef, being its increased value by feeding at the end of the experiment. The tallow is about the eighth part of a hundred of the live weight, or that multiplied by 08 will give the nett weight of the tallow. The hide is about the fifth part of a hundred of the live weight, or that multiplied by 05 will give the nett weight of the hide; and the live weight multiplied by 28, will give the weight of the entrails and refuse.

Lot 1st, subjected to these rules, stands thus:

Improvement in live weight, 108 stones equal 61 stones, 10 lb. beef, at 6s. per stone,	£18	10	3¼
Increased value of the carcass of 339 stones, at 6d. per stone,	8	9	6
Increase of value from feeding,	£26	18	9¼
Deduct cost of keep of each beast, £5: 2: 7 by 6,	30	15	6
Loss on feeding lot 1st,	£3	15	8¾
Being £12: 6: 0¾ per cent.			
Lot 2d—Improvement of live weight, 101 stones, equal 57 stones, 10 lb. at 6s. per stone,	£17	6	3¼
Increased value of carcass of 310 stones, at 6d. per stone,	7	15	0
Increase of value from feeding,	£25	1	3
Deduct cost of keep of each beast, £3, 17s. by 6,	24	2	0
Profit on feeding lot 3d,	£1	9	3½
Being £8: 10: 1 per cent.			
Lot 3d—Improvement of live weight, 49½ stones, equal 28 stones 4 lb. beef at 6s. per stone,	£8	9	8½
Increased value of carcass of 326 stones at 6d. per stone,	5	13	0
Increase of value from feeding,	£14	1	8½
Deduct cost of keep of each beast, £1: 18: 7½ by 6,	11	11	7½
Profit on feeding of lot 3d,	£2	11	1
Being £22: 1: 1 per cent.			

Thus when Turnips alone were used, a profit of 22 per cent. was realized; when corn was used along with turnips, the profit was diminished to 8¼ per cent; but when still more expensive food used, that is, corn and linseed cake, along with turnips and potatoes, a loss was sustained of no less than 12 and three tenths per cent.

Two pairs of the above cattle were selected and exhibited at the Local Show in this county, and gained the first prizes as the best beasts bred in this county. One pair belonged to lot 1st, and the other sold on the ground for £20 a-piece.—Their live and dead weights were respectively as follows:—No. 1, live weight 112 stones; dead weight of beef, 66 stones, 2 lb.; tallow, 8 stones, 10 lb.; hide, 5 stones 11 lb.; other offals, 32 stones 5 lb. No. 2, (from lot 2d,) live weight 100 stones; dead weight of beef, 58 stones, 6 lb.; tallow, 7 stones, 7 lb.; hide, 4 stones, 12 lb.; other offals, 29 stones, 3 lb. No. 2, live weight, 103 stones; dead weight of beef, 52 stones, 3 lb.; tallow, 9 stones; hide, 4 stones, 12 lb.; other offals, 26 stones, 13 lb. No. 4, live weight 109 stones; dead weight of beef, 62 stones, 4 lb.; tallow, 9 stones, 4 lb.; hide, 5 stones, 12 lb.; other offals, 31 stones, 8 lb.

We shall give another view of the subject by estimating the cost of producing a lb. of live weight.

Lot 1st cost 4.884 pence for every lb. of increased live weight.
Lot 2d cost 3.92 pence for every lb. of increased live weight.
Lot 3d cost 4.39 pence for every lb. of increased live weight.

We are not aware that any one has hitherto attempted to assign the separate agency of each kind of food in the production of live weight, when more kinds than one are employed in the feeding of cattle. Could this be done in a satisfactory manner, the question would at once be set at rest—which food was the most profitable? We have already stated the cost of producing 1 lb. of live weight in each of the three lots of cattle in this experiment, where it appears that the joint agency of turnips and corn is the cheapest of the three. But we are not prepared to say that the like result will be uniformly obtained, because, although observing the improvement in live weight of a considerable number of cattle on a given quantity of turnips to be, on an average, an increase of 1 lb. of live weight for every 90 lb. of turnips, under good management, and with good cattle, yet we have seen cattle which did not improve 1 lb. of live weight for every 1000 lb. of turnips. By this experiment, lot 3d only increased a lb. of live weight for every 116 lb. of turnips; and it will be observed, from what cause we know not, that for the first 22 days of this experiment, this lot increased only 8 stones. Now, for 46 days immediately preceding 22d November, 1834, the beginning of the experiment, these same six cattle increased 48½ stones, or 113 lb. each beast; while, from a trial made for 8 days, from 7th till 14th November, inclusive, they consumed 160.85 lb. each per day of common turnips, (white globe,) which gave only 65.47 lb. of turnips to a lb. of increased live weight. But, avoiding lengthened details of other experiments, we will assume 90 lb. of turnips, as being equal to the production of 1 lb. of increased live weight, and from this datum, endeavor to ascertain the agency of each different kind of food employed in the feeding of lots 1st and 2d. We shall begin with lot 2d, and divide 6 times 15.226, the quantity of turnips consumed by this lot by 90 and the quotient is 1015 lb. of live weight, as having been produced from the agency of turnips. Lot 2d, also, consumed 1440 lb. potatoes. We say that 40 lb. of potatoes will yield 1 lb. of increased live weight, the result will therefore be 1440 divided by 40, equal 36 lb. live weight as having been produced from the agency of potatoes; therefore 1015 add 36 equal 1051, and the remainder, 363 lb. as having been produced by the agency of corn; which make up 1414 lb. the total increase of live weight.

Lot 1st, by the same rule, stands thus:—
14,563 by 6, equal 87.378, divided by 90, equal 970 lb. live weight, by the agency of turnips.
480 by 6, equal 2880, divided by 40, equal 72 lb. of live weight, by the agency of potatoes.
531 by 6, equal 3186, divided by 8.77, equal 363 lb. of live weight by the agency of corn.
389 by 6, equal 2334, divided by 21.81, equal 107 lb. of live weight by the agency of linseed cake.

The cost of producing a pound of increased live weight by the above data is—
90 lb. of turnips at 4d. per cwt. equal 3.2142 pence.

0 lb. of potatoes at 1s. 6d. per cwt. equal 6.4285 pence.
8.77 lb. of corn at 3s. 3d. per bushel of 60 lb., equal 5.7 pence.
21.81 lb. of linseed cake at ¾d. per lb., equal 16.3575 pence.

(To be Continued.)

APPLE MOLASSES.

There is many a good housewife, who has more faith in her own experience, than in the science of chemistry, that knows not the value of Apple Molasses; but still believes it to be the same kind of tart, smoky, worthless stuff, that has from time immemorial, been made by boiling down cider. It is not within my province, at this time, to attempt to convince such, that there is a chemical difference, though it might easily be shown, that they are almost as different as sugar and vinegar. I would, however, invite them to lay aside their cider this year, and try the plan of boiling down the juice of the apple that has not been exposed to the air by grinding and pressing.

Last autumn, I placed a number of bushels of Wetherill's sweeting apples in two large brass kettles, wiih water just sufficient to steam them; when they had boiled soft, I turned them into a new splinter basket, containing some straw, and placed on them a barrel head, and a heavy weight. The juice was caught in a tub. This was repeated until I had juice enough to fill the kettles, when I commenced boiling it down, and attended to it strictly, frequently skimming it, till it became of the consistency of cane molasses. The native acids of the fruit imparted a peculiar flavor, otherwise it could hardly be distinguished from the syrup of the cane. It was used in my family for making sweetmeats, for sweetening pies, for dressing on puddings and griddle cakes, and a variety of other purposes. The cost of making it is very trifling, and the means are within the reach of every farmer.—*Ohio Farmer.*

PRESERVING POTATOES.

Wherever practicable, potatoes, should be dug during dry weather, as the earth is then less liable to adhere to them, and they soon become dry. They should be exposed as short a time as possible to the light, as it always injures their quality for whatever use they are intended. Hence a coarse blanket or boards should be employed to cover them in the heap or wagon, during the time that they necessarily remain in the field. Exposure to the light for any length of time, even in a cellar, greatly injures potatoes; the bins therefore in which they are kept, should be so constructed as to exclude it entirely; in short, they should be kept in a state similar to that before they are dug,— that is, secure from air and light, with a slight degree of moisture to prevent withering, and a temperature so low as to keep them from vegetating. The difference in the quality caused by good and bad keeping is very rarely appreciated.

One of the best methods of keeping them in cellars, is to construct a bin, put sand in the bottom, line the sides and ends with smooth and handsomely cut sods, and when the potatoes are put in, cover them with sods and beat them down closely. In this way, all the above requisites may be obtained. Potatoes intended for constant family use, may be kept temporarily in barrels and covered with sand.

When they are buried in the field, a dry piece of ground should be selected, which shall be at all times entirely free from surface water. They are to be covered, first, thickly with straw, and afterwards with several inches of compact earth. A second *thick* coat of straw, and another of earth, is then to be applied. The straw for the other, or second coat, should be long and straight, such as has been thrashed with a flail, and placed in a position so as to throw the moisture and wet from the peak down the side, like the thatching of a roof. This keeps the inner cost of earth dry, and effectually prevents the water from penetrating the heap. The earth for the outer coat, should be fine and compact so as to throw off the rain. If these directions are carefully attended to, there will be no danger of losing potatoes by freezing and rotting, and they will keep in the best condition till spring.—*The Genesee Farmer.*

CONSTRUCTION OF ICE HOUSES.

As the present is a suitable season for attention to ice houses, a few short directions relative to their construction may not be unacceptable.

The most usual method is to place the apartment for containing the ice, below the surface of the earth. When this is done, the pit should be 8 or 10 feet wide, and about 12 feet long, and should be sunk to a depth of at least 8 feet. Posts, made of 4 inch scantling, are placed round it, at a few inches distance from the walls of the pit: on the opposite sides of these, boards are nailed horizontally, thus leaving a space between the two partitions thus formed, and another between these and the earth around them. These spaces are to be filled with the exhausted bark of tan pits after it has been made dry. Similar spaces, made beneath the floor, are to be similarly filled.—These walls, thus constructed, should project a foot or two above the ground, and should be surmounted by a very steep roof, also made double, the intervals between the boards being filled with powdered charcoal. It is to be painted white outside, to prevent the absorption of the rays of the sun. The steepness, and consequent height, of the roof, affords a convenient passage into the house through a triangular door at one end.

The pit is divided into two apartments by a double partition, filled with tan. One of these, which should be the largest, and most remote from the door, is for the reception of the ice. The other is employed as an entry, at the *bottom* of which is a door made also double and filled with tan, through which the ice is withdrawn as it is needed for use. This entry may be employed for keeping butter, milk, &c., during the heat of summer. The space above the ice is to be filled with dry straw, after the ice is deposited.

It is not essential that the ice house be made beneath the surface of the ground, as many are now constructed entirely above, and answer the purpose perfectly. But in this case the walls of tan should be much thicker.

The ice for filling may be drawn any time during winter, but it should not be deposited except during the coldest weather. It should be cut into regular blocks and as closely packed as possible, all the interstices being filled with pounded ice.—*Ibid.*

DEEP AND SHALLOW PLOUGHING.

Erroneous conclusions are sometimes drawn, on this subject, from very partial observations. Deep ploughing in soils naturally shallow, always necessarily throws up much of the unproductive subsoil. Where the land is thus ploughed but once, this subsoil is thrown uppermost, hence the crop is often very deficient. Where the ploughing is repeated, the upper, fertile soil, and the subsoil become mixed, consequently the soil, though deeper, is less fertile than at first; and a diminished crop is still the result, especially in case of those crops whose roots are confined chiefly to the surface. Experiments, such as these, have induced the belief with some, that deep ploughing is in all cases useless, if not positively detrimental.

But the error of this belief is proved by the fact, that with nearly all crops, the heaviest are obtained from deep fertile soils. Where the quantity of manure to be applied to land is limited, it will generally produce a much greater effect on the crop if not ploughed deep beneath the surface. Soils, naturally shallow, should therefore be *gradually* deepened by successive ploughing each year, during which the quantity of manure applied should be such as to preserve the original fertility.—*Ibid.*

HUSSEY'S HORSE MOWING MACHINE.

We insert with pleasure the following testimonials in favor of the above machine. Believing that every thing which tends to save labor, and consequently to cheapen it, is of the very first importance to the agricultural interest, we at all times are gratified to see implements of approved construction and utility introduced into use, and our gratification is always enhanced, when new inventions are submitted, as is the case in the present instance, to the test of gentlemen farmers of long experience and elevated standing.

Mr. Hussey—

Sir—Your Wheat Cutting Machine was used by me in securing my clover seed; with one man, three boys and two horses, we cut about 12 acres per day. The operation was in every respect complete—the clover was well cut, and deposited in proper sized heaps, and no raking required, further than to remove the heaps of cut clover from the track of the machine; the whole operation was easily performed by the hands and horses. In the operation of cutting wheat, I followed the machine for about two acres in the field of Mr. John Stonebreaker, during the late harvest, and can vouch for the operation in securing his wheat in the manner described by him in his publication.

The late improvement made by you in your machine has added greatly to the beauty and facility of its operation.

Yours, respectfully,

F. TILGHMAN,

Sept. 15, 1837. Rockland.

We the subscribers certify, that we have seen Mr. Hussey's wheat cutter in operation, in the clover field of Col. Tilghman, and fully agree,

with him in the description given, of the operation of the machine.

WILLIAM H. FITZHUGH,
JOHN R. DALL,
THOS. EMORY, East. Shore, Md.
WILLIAM HOLLYDAY,
THOMAS E. TILGHMAN,
RICHARD T. HOLLYDAY,
FRISBY TILGHMAN, Jr.

Sept. 15, 1837.

From the Hagerstown Torch Light.

Mr. Bell—Dear Sir: Will you please give this a place in your paper for the benefit of wheat growers. As the subject is of public interest it is hoped that other papers will circulate it through the grain growing districts of the country.

I procured a Reaping machine this summer of Mr. Hussey, the inventor, which I have used thro' my wheat harvest. It was in constant use every day, and performed its work to my satisfaction, and far better than I had any expectation of when I first engaged it of Mr. Hussey. When the ground is clear of rocks, loose stones, stumps, &c. and the grain stands well, it cuts it perfectly clean, taking every head, and if well managed scatters none, but leaves it in neat heaps ready for binding. When the grain is flat down, the machine will of course pass over it; but if it be leaning, or tangled only, it is cut nearly as well as if standing, excepting when it leans from the machine, and then if the horses are not in a trot, it will be very well cut. But in cutting such grain much depends on the expertness of the hand, who pushes off the grain, in making clean work, and good sheaves. I found the machine capable of going through any thing growing on my wheat land, such as weeds and grass, no matter how thick.

After my harvest was over, I cut my seed timothy, with the same neatness, and ease, that I did my grain. As respects the durability of the machine, I can say this much for my machine, that not the least thing has given out yet; it appears as strong as a cart; and but little liable to get out of order, if well used. I was advised by Mr. Hussey of the necessity of keeping some of the parts well greased; this I have punctually attended to, and no perceptible wear yet appears, beyond the ordinary wear of any other machinery.

It is immaterial to the machine whether the speed be a walk, or trot; though a walk will make the most perfect work. My speed was a common walk, but a trot is sometimes necessary to counteract the effect of a strong wind when blowing from behind, in order to incline the grain backwards, on to the platform, to make good bundles. A quick walk is required to make good work in very short and scattering grain. The machine performs well, up or down hill, provided, the surface be not two broken. By its compactness and ease of management, rocks, and stumps too high to be cut over, can be easily avoided.—Although a rough surface is very objectionable, yet I have cut over very rocky ground with no material difficulty. I can say one thing which to some may appear incredible, but it is not the less true, the cutters of my machine have not been sharpened since I have had it; nor have I yet seen any appearance of a need of it in the quality of its work. How many harvests a machine would cut without sharpening is hard to say, I propose sharpening mine once a year only. I have used two horses at a time in the machine, and sometimes changed at noon; they worked it with ease, the draught being light. I took no account of what I cut in any one day, with this exception; in less than half a day I cut six acres, and was often detained for want of the requisite number of binders; by which much time was lost. My machine being something narrower than those generally made by Mr. Hussy, I could cut but about one acre in going two miles, this at the moderate rate of two and a half miles per hour would amount to twelve and a half acres in ten hours, and at four miles per hour, a speed at which the work is done in fine style, the amount would be *twenty* acres in ten hours. I should judge my quantity per day to range between ten and fifteen acres, yet I am decided in the opinion that I can cut twenty acres in a day, of good grain, or good ground, by the usual diligence of harvest hands, with a little increase of my usual speed, and a change of horses.

Two hands are required to work the machine, a man to push off the grain, and a boy to drive, besides a number of binders proportioned to the quantity cut. As the machine can be drawn equally fast in heavy or light grain, the number of binders is necessarily increased in heavy grain, except an additional speed be given in light grain. Under every circumstance the number of binders will vary from four to ten; and when the usual care is practised by the binders, there will be much less waste than in any other method of cutting.

I speak with more confidence of the merits and capacity of Mr. Hussey's reaping machine from the circumstance of having pushed the grain off myself for several days, in order to make myself practically, and thoroughly acquainted with it before putting it into the hands of my laboring men. The land in this county being rather rocky, and uneven, it is hard to say what may be the ultimate advantage of these machines to our farmers, but from what little experience I have had I am resolved not to be without one, or two of them. I can therefore recommend the machine with confidence, especially to those who have a large proportion of smooth ground in cultivation. It is undoubtedly a labor saving machine, and worthy of their attention.

JOHN STONEBRAKER.

Hagerstown, Aug. 15, 1837.

WEIGHING CATTLE.

The Graziers of Virginia are about to memorialize the corporate authorities of Baltimore, Washington, Georgetown and Alexandria, praying the establishment of some regular mode in which the cattle sent to those markets shall be weighed. They complain that under the existing practices, there are no means of ascertaining the precise value of the animals at the time of sale. The manner in which the evil complained of is to be remedied is of course left to those whose legislative action is requested, at the same time that two modes are proposed as being efficacious. One of these plans is to appoint weigh-masters and erect scales of sufficient power, where the bullocks may be weighed alive, subject to such tare as experience may show to be equitable, or as may be agreed on at the time of sale. The other course is to appoint officers who shall establish a slaughter house, and to whom every average bullock shall be handed over to be killed and weighed, and whose further duty it shall be to weigh all bullocks sold by weight when the contract requires that all shall be weighed.—*Fincastle Democrat.*

ITALIAN SPRING WHEAT.

The subscribers daily expect to receive about 100 barrels of Italian Spring Wheat, raised near Rome, N. Y. by J. Hathaway, esq. from imported seed.

This wheat was raised by Mr. H. particularly for seed grain, and the greatest care has been taken to prevent mixture from other sorts. The article is perfectly clean and put up in tight barrels, which hold 3¼ bushels each Those desirous of being supplied with this desirable article will make early application.

The price will be $5 per bushel, the cash to be paid on delivery of the grain. ROBT. SINCLAIR, Jr. & CO.
Light, near Pratt street, Baltimore.

oc 24 3t

KENTUCKY BLUE GRASS SEED.

Just received from the South West a lot of Kentucky Blue Grass Seed This grass is particularly desirable for pastures and for hay, and forming fine green or rather blue lawns, &c. R. SINCLAIR, Jr. & Co.,
Light, near Pratt-street, Balt.

Sept. 10. 3t.

ROBERT SINCLAIR'S NURSERY,

AT CLAREMONT, NEAR BALTIMORE.

This Establishment now comprises between 20 and 30 acres, losely planted with a most CHOICE COLLECTION, from ours and foreign countries of the FINEST VARIETIES known—Of Pear, Plum, Cherry, Peach, Apple, Quince, Apricot, Nectarine, Grape Vines, Currant, English Gooseberry, Raspberry, Strawberry, English Walnut, Ornamental Trees, including Evergreens, Shrubs and Roses, all very thrifty and of larger size than any former year, especially the Peach, Apple, and Trees suitable for planting in streets.

Also, about half an acre of double Dahlias, now in full bloom, of almost every color and shade. Amateurs are invited to make their selections.

20,000 Morus Multicaulis Mulberry Trees, with large roots, 2 to 7 feet high, at liberal prices, varying according to size.

60,000 Cuttings of do. well ripened wood.

20,000 white Italian Mulberry Trees, 2 years old.

For further information please address the proprietor, near Baltimore. Trees and Plants ordered from him are carefully selected and faithfully packed, and forwarded by land or sea, as directed, and conveyed to the city without charge. Printed and priced catalogues will be sent on application gratis.

R. Sinclair, jr. & Co., Seedsmen, in Light st., act as agents, where necessary.

oc 17 5t ROBERT SINCLAIR, senr.

GEESE AND TURKEYS.

The subscriber has for sale a few pair of those beautiful white Turkeys, so highly esteemed for sporting gentlemen's lawns. Also the large Westphalian Geese, from Richd Barnet's stock, BOTH PURE WHITE.

oc 17 5t ROBERT SINCLAIR, sen.

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Mulberry culture—advice to wheat growers—advice to gather potatoes, beets, &c.—notice of the closing of sales of spring wheat—harvesting beets—smut in grain—insects in wheat—culture of mangel wurtze'—the crops—on meadow land—blind ditches and wells—experiments in feeding cattle—to make apple molasses—preserving potatoes—construction of ice-houses—on deep and shallow ploughing—Hussey's horse mowing machine—weighing cattle—advertisements—prices current.

BALTIMORE PRODUCE MARKET.

☞ *These Prices are carefully corrected every Mo.*

	PER	FROM	TO
Beans, white field,	bushel.	1 25	—
Cattle, on the hoof,	100lbs	6 00	7 00
Corn, yellow	bushel	96	98
White,	"	90	92
Cotton, Virginia,	pound	11	—
North Carolina,	"	—	—
Upland,	"	10	12
Louisiana —— Alabama	"	—	—
Feathers,	pound.	50	—
Flaxseed,	bushel.	1 37	1 50
Flour & Meal—Best wh. wh't fam.	barrel.	10 50	11 50
Do. do. baker's	"	—	—
Super How. st. from stores	"	8 50	—
" " wagon price,	"	8 25	—
City Mills, super	"	8 25	—
" extra	"	8 75	8 50
Susquehanna,	"	—	—
Rye,	"	—	—
Kiln-dried Meal, in hhds.	hhd.	24 50	25 00
do. in bbls.	bbl.	5 25	5 50
Grass Seeds, wholes. red Clover,	bushel.	7 50	8 00
Kentucky blue	"	2 50	3 00
Timothy (herds of the north)	"	3 50	4 00
Orchard,	"	2 50	3 00
Tall meadow Oat,	"	—	3 00
Herds, or red top,	"	1 00	1 25
Hay, in bulk,	ton.	12 00	15 0
Hemp, country, dew rotted,	pound.	6	7
" water rotted,	"	7	8
Hogs, on the hoof,	100lb.	7 00	—
Slaughtered,	"	—	—
Hops—first sort,	pound.	9	—
second,	"	7	—
refuse,	"	5	—
Lime,	bushel.	32	35
Mustard Seed, Domestic, —; blk.	"	3 50	4 00
Oats,	"	33	34
Peas, red eye,	bushel.	—	—
Black eye,	"	75	1 00
Lady,	"	1 00	—
Plaster Paris, in the stone, cargo,	ton.	—	3 50
Ground,	barrel.	1 62	—
Palma Christa Bean,	bushel.	—	—
Rags,	pound.	3	4
Rye,	bushel.	82	85
Susquehannah,	"	—	none
Tobacco, crop, common,	100 lbs	2 50	3 50
" brown and red,	"	4 00	6 00
" fine red,	"	8 00	10 00
" wrappery, suitable for segars,	"	10 00	20 00
" yellow and red,	"	8 00	10 00
" good yellow,	"	8 00	12 00
" fine yellow,	"	12 00	16 00
Seconds, as in quality,	"	—	—
" ground leaf,	"	—	—
Virginia,	"	4 50	9 00
Rappahannock,	"	—	—
Kentucky,	"	4 00	8 00
Wheat, white,	bushel.	1 85	1 90
Red, best	"	1 80	1 83
Maryland inferior	"	1 10	1 40
Whiskey, 1st pf. in bbls.	gallon.	39	40
" in hhds.	"	—	37
" wagon price,	"	bbls	30
Wagon Freights, to Pittsburgh,	100 lbs	1 50	—
To Wheeling,	"	1 75	—
		washed.	*unwash*
Wool, Prime & Saxon Fleeces,	pound.	40 *to* 50	20 22
Full Merino,	"	35 40	18 20
Three fourths Merino,	"	30 35	18 20
One half do.	"	25 30	18 20
Common & one fourth Meri.	"	25 30	18 20
Pulled,	"	28 30	18 20

MORUS MULTICAULIS TREES.

The subscriber has from 25,000, to 30,000 Morus Multicaulis trees now growing at his residence, with roots of 1, 2, and 3 years old, which will be ready for sale this fall, and which he will sell on moderate terms.

EDWARD P. ROBERTS.

Baltimore, Md.

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
Apples,	barrel.	—	—
Bacon, hams, new, Balt. cured	pound.	13	13½
Shoulders, do	"	10½	10½
Middlings, do	"	do	do
Assorted, country,	"	9	9½
Butter, printed, in lbs. & half lbs.	"	20	25
Roll,	"	—	—
Cider,	barrel.	—	—
Calves, three to six weeks old	each.	5 00	6 00
Cows, new milch,	"	25 00	40 00
Dry,	"	9 00	12 00
Corn Meal, for family use,	100lbs.	2 06	2 12
Chop Rye,	"	—	1 75
Eggs,	dozen.	18	—
Fish, Shad, No. 1, Susquehanna,	barrel.	6 75	—
No. 2,	"	6 50	—
Herrings, salted, No. 1,	"	2 75	2 87
Mackerel, No. 1, —— No. 2	"	9 00	10 00
No. 3,	"	4 75	—
Cod, salted,	cwt.	3 00	3 25
Lard,	pound.	9	10

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,	par	VIRGINIA.	
Branch at Baltimore,	do	Farmers Bank of Virgi.	1¼a1½
Other Branches,	do	Bank of Virginia,	do
MARYLAND.		Branch at Fredericksburg	do
Banks in Baltimore,	par	Petersburg,	½
Hagerstown,	¼a	Norfolk,	1¼a1½
Frederick,	do	Winchester,	½
Westminster,	do	Lynchburg,	1½ ½
Farmers' Bank of Mary'd,	do	Danville,	½
Do. payable at Easton,	1	Bank of the Valley,	½
Salisbury,	2 per ct. dis.	Branch at Romney,	do
Cumberland,	3	Do. Charlestown,	do
Millington,	do	Do. Leesburg,	1½
DISTRICT.		Wheeling Banks,	¾a1
Washington, Georgetown, Alexandria, Banks,	¼p.c.	Ohio Banks, generally	6a7
PENNSYLVANIA.		New Jersey Banks gen.	5
Philadelphia,	¼a	New York City,	¼
Chambersburg,	1	New York State,	3a4
Gettysburg	do	Massachusetts,	3a3½
Pittsburg,	3½	Connecticut,	3a3½
York,	1	New Hampshire,	3a3½
Other Pennsylvania Bks.	4	Maine,	3a3½
Delaware [under $5]	6	Rhode Island,	3a3½
Do. [over 5]	2	North Carolina,	5
Michigan Banks,	10	South Carolina,	8a10
Canadian do.	10	Georgia,	do
		New Orleans,	12

A HALF DURHAM BULL CALF—FOR SALE.

The subscriber has a beautiful red and white bull calf, HALF DURHAM, being got by a full bred Durham bull, which he sold last December for $300, and out of a very large Cow owned by him. The cow when he bought her was represented as half Durham, but as she has no pedigree he designates her offspring as half Durham. His sire was a noble animal, out of an imported cow, and got in England by one of the Colling's bulls. To any gentleman who may desire an improving cross, and who may be averse to give the higher price of the full bred Durhams, this calf offers an excellent opportunity, as he has all the fine points of the latter, and would be taken by an incompotent judge for a full bred. His price is $30—his age 5 weeks old.

EDWD. P. ROBERTS,
oc 3 Baltimore, Md.

A DURHAM BULL FOR SALE.

UNCAS, a beautiful white Bull of the improved Durham short-horn breed, 3 years old, will be sold a bargain, $250, as his owner, desirous of changing his cross-bought another bull at the sale of Mr. Whittaker's stock. Uncas has a pedigree tracing to the herd-book, and will be warranted pure.

☞ Applications by letter to be post-paid. Address
s 29 EDWD. P. ROBERTS, Baltimore, Md.

BAKFWELL RAMS.

For sale 6 Bakewell Rams, one of which was imported. The prices are as follows, viz: the IMPORTED Ram $150, No. 1. of the native bred, $100—No. 2, $75; No. 3, $50; Nos. 4 and 5, 35 dollars each. The five latter rams are one year old, in fine condition, and beautiful specimens of their peculiar and much admired long-wooled breed. As a proof of their superior quality it may be well to state that two brothers of the latter five were sold at the great Whitaker sale recently held in Philadelphia, for $100 each, and a third one since for the same money at private sale. Applications to be addressed in writing to

JOHN BARNEY,
Philadelphia.
Oct. 10. 3t.

DURHAM & AYRSHIRE CATTLE

The subscriber is authorised to sell the following superior Cattle:

Montezuma, an improved Durham short-horned bull, a light, or fashionable roan. He was *imported* by Rezin D Shepherd, Esq. in March, 1835, for whom he was purchased from Mr. Page in the county of Durham, England. Montezuma was got by *Wharfingdale*, dam by *Mazeppa bonum*, g. d. by Priam: he was calved 30th March, 1833.

As an evidence of his superior powers in the perpetuation of his species, we would state, that he is the sire of *Nancy Thompson* and *Hampton*, calves now owned by Mr. George Beltzhoover. Nancy Thompson, was calved in March last, and now weighs 527 lbs. Hampton was calved 4th May last, and how weighs 380 lbs. Indeed all the calves of Montezuma, which we have seen, are remarkable for their extraordinary size and fine points:

A *short horn improved Durham bull* calf, 3 months old, got by Neptune, he by Orozimbo out of a full-blooded Durham heifer, 2 years old, the dam of which was imported by R. D. Shepherd, Esq. and sold to the Hon. Hy. Clay.

6 *Ayrshire* calves, 3 males and 3 females, from 2 to 8 months old. These calves are all out of cows imported by R. D. Shepherd, Esq. selected by his Agent from the best herd in the kingdom of Great Britain. The mothers of two of those calves, with their first calf, respectively, gave 20 and 24 qts. of milk per day, when fresh.

The Ayrshire breed of Cattle is justly considered the best dairy cows in Scotland, they are of medium size, hardy of constitution, docile in disposition, easily kept, and deep milkers, yielding as much *milk* and *butter*, weight considered, as any other variety.

Letters *post paid* to the subscriber will meet with prompt attention. EDWARD P. ROBERTS,
Editor Farmer and Gardener, Baltimore, Md.
sep 12 4t

CLIME'S COMBINED PLOUGH.

The subscriber having purchased the right for Maryland, with the exception of Harford and Cecil counties, to *sell patent rights for*, and make and vend, the above ploughs, takes pleasure in informing the agricultural public and mechanics, generally, that he is prepared either to sell *patent rights* for counties or districts, in Maryland, (those counties excepted) or to supply all orders for said ploughs from adjoining states.

The above plough is eminently calculated for *ploughing in small grain, for the cultivation of corn, potatoes, cotton, tobacco*, and in fine for all row culture, as well as for turning up stubble in light soils. The public may form an idea of the superiority of this implement for the above purposes, when the undersigned states, that with the *same propelling force*, it is competent to do as much work again, as any other plough now in use. In corn culture owing to its peculiar construction, it not only turns under the grass and weeds, but hills the corn at the same time, thus dispensing with the trouble, labor and expense of *hoers*. Nor is it less important in its manner of doing its work, so far as time and labor are concerned, as it lays its furrow with such accuracy, and so completely covers the superincumbent vegetable substances, as to ensure its speedy and effectual decomposition, thus preventing the *re-vegetation* of the matter turned under. In places where labor is high, this plough will of course be appreciated, as it effects a *saving* of 50 per cent., doing double work, —a thing worthy of farmers consideration, in these times.

J. T. DURDING,

at J. T. Durding & Co's. fronting Grant and Ellicott-sts. in the rear of Mr. Adam Kye's Grocery, Pratt-st. wharf